Restructuring Canada's

Pacific

Fishery

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Charting a New Direction for the Pacific Salmon Fishery

n June 19, 1998 Canada's
Fisheries and Oceans
Minister David Anderson
laid out a new direction which will
fundamentally alter—and secure—the
future of the Pacific salmon resource.

The Minister announced an unprecedented, conservation-based Salmon Management Plan for 1998. He also announced, on behalf of the federal government, new measures in three broad areas:

 dramatically increased efforts in protecting and rebuilding salmon habitat;

- restructuring the commercial fishing industry by further reducing the fleet, moving to selective harvesting, diversifying the fisheries, and
- assisting people and communities to adapt to the changing Pacific salmon fishery.

In total, these measures represent new investment of \$400 million by the Government of Canada.

This newsletter provides highlights of the measures and initiatives, and an update on what's been done to date.

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Helping People and Communities

Recent conservation measures have been difficult for the fishing communities in British Columbia. However, we know that avoiding these measures would only cause greater pain in the long run. Inaction on conservation would be unacceptable and could have drastic impacts for both fish resources and those who depend on the fishery for their livelihood.

Part of the \$400 million includes a new federal investment of \$100 million in a series of

measures that have been provided to help people and communities adjust to the changing fishery. The goal is a more prosperous future for those now struggling to make ends meet in a troubled industry.

A key component in this area is Human Resources Development Canada's programs to assist individuals from all sectors - First Nations, commercial, and recreational. For those affected by long-term restructuring, the focus is on finding work outside the fishery.

Human Resources Development Canada (HRDC)

As part of federal measures to help people and communities, HRDC will provide employment adjustment assistance to individuals and communities affected by salmon fishery closures. Funding under the June 19, 1998 announcement will support initiatives and programs that help people adjust to changes in the fishery; whether to prepare for employment outside the fishery, to supplement or replace fishing employment with alternative work, or to explore other adjustment possibilities.

Since 1996, HRDC has committed more than \$37.6 million to help British Columbia salmon fishing industry workers adjust to changes in the labour market (280 projects to help 10,416 workers.) In addition, fish harvesters have received more than \$80 million in EI fishing benefits during the same period. HRDC's network of Human Resource Centres delivers a wide range of programs and services at the local community level targeted at helping all of our clients, including fishing industry workers, make the necessary adjustments to find employment.

For a variety of reasons, an increasing number of fishing industry workers find themselves unable to qualify for these HRDC employment programs. New funding under the Fisheries Restructuring and Adjustment plan will be used to provide assistance and develop initiatives that will help those workers and communities whom

we have been previously unable to assist.

As a result, all those affected by the salmon fishery closures are now eligible for HRDC programming, regardless of their eligibility for Employment Insurance. This includes commercial fish harvesters, processors, aboriginal fishermen, sport fishing guides, fishing lodge employees, suppliers of sport fishery bait and equipment, tourism workers and other businesses and individuals who are suffering because the commercial and recreational fisheries are bringing less income into the local economies.

HRDC has revised existing employment programming options to include these new clients. In addition, clients will now be able to access two new programs, Mobility Assistance and Term Job Creation, to help meet their needs for relocation or more work experience.

In order to ensure that monies are spent where they are needed, the department is collaborating with local communities to establish priorities and develop effective programs that meet specific community needs. These activities will complement other programs offered by other federal departments under the \$400 million package of initiatives.

For more information about HRDC programs for fishing industry workers, please contact your nearest Human Resource Centre of Canada.





Summary of HRDC adjustment programs under the June 19, 1998 Pacific Fisheries Adjustment and Restructuring announcement.

Program	Purpose
Targeted Wage Subsidies	To assist unemployed individuals in obtaining skills and experience by providing a subsidy to employers who will provide work experience and employment.
Self-Employment	To work with community economic development partners to assist unemployed individuals set up their own business.
Job Creation Partnerships	Work with community partners to help unemployed individuals get work through work experience and labour market development activities which are linked to local economic development plans.
Term Job Creation (for non EI eligible clients)	To support community employment development that provides unemployed individuals with short-term opportunities through which they can gain work experience and transferable skills to assist them to re-enter the work force.
Training and Skill Development	To assist unemployed individuals to obtain new or enhanced skills.
Local Labour Market Partnerships	Partnerships are formed to develop coherent adjustment strategies to assist unemployed individuals.
Mobility Assistance	To assist unemployed individuals who are willing to relocate permanently from their area of residence to areas where they can find work.
Employment Assistance Services	HRDC's contracts with community based agencies and institutions to deliver the services for unemployed individuals.

Western Economic Diversification Canada-Coastal CFDC's Fishery-related Activities

Western Economic Diversification Canada (WD) provides a range of financial resources to British Columbia's coastal Community Futures Development Corporations (CFDCs) as part of the federal government's initiatives to assist fishermen, communities and small businesses to adjust to the changes in the fishing industry.

Funding by WD and Fisheries and Oceans Canada enables B.C.'s 12 locally and volunteer run coastal CFDCs to provide loans for startup, working capital and asset capital to displaced fishermen wanting to pursue oceanbased commercial opportunities or to diversify into new small business opportunities. The CFDCs' Fisheries Adjustment Coordinators work with fishermen, communities and small businesses to identify local needs, develop economic adjustment opportunities and organize Small Business Info-Fairs to provide assistance to those wanting to start or expand a business. The CFDCs are also able to test the feasibility of and develop community-based adjustment opportunities and undertake initiatives which have potential to benefit all coastal communities through a cooperative approach. The following examples illustrate how CFDCs are responding to the needs of their communities.

Development of New Fisheries Opportunities

Community Futures Development
Corporation of Mount Waddington — This
CFDC is working closely with other key organizations in the region to examine the feasibility
of establishing a new shellfish tenure system
and local infrastructure developments. These
initiatives are expected to lead to at least 100
new full-time jobs and as many as 400 over
future years.

Community Futures Development
Corporation of Cariboo-Chilcotin — The
Fisheries Adjustment Coordinator working out
of this CFDC with the residents of Bella Coola
has organized a local fish plant steering com-

mittee which is developing an action plan based on the identification and pursuit of valueadded fish processing opportunities.

Nuu-Chah-Nulth Economic Development Corporation — This Aboriginal CFDC is about to embark on a study of the local aquatic resources within the Alberni region which will identify those which hold potential for a viable commercial harvest.

Small Business Lending

Community Futures Development
Corporation of Central Island — Through a
\$60,000 loan from the Fisheries Legacy Fund,
this CFDC has assisted a fisherman in a valueadded initiative by establishing a smokehouse
venture for salmon and tuna. By doing so, this
entrepreneur has been able to access new markets in the United States.

Outreach to the Community

Community Futures Development
Corporation of Alberni-Clayoquot — This
CFDC hosted a two-day Small Business InfoFair in January 1998 which attracted 500 local
participants in the Port Alberni area to meet
with 13 federal agencies offering adjustment
programs and services. The event was twinned
with a local conference on ocean and aquatic
resource opportunities.

Services to Displaced Fishermen

Community Futures Development
Corporation of Cowichan — This CFDC has
run job creation programs in the Duncan area
which resulted in 47 people undertaking a project to conduct stream inventory work. The
CFDC also helped a newly-formed local workers co-op secure a contract to do stream classification work with two local forest companies.

Processes to Identify Local Diversification Opportunities

Community Futures Development
Corporation of the Sunshine Coast — The
CFDC is engaged in a joint process with the
Sunshine Coast Regional District to develop
the economic potential for tourism arising from
the transfer of three local wharves from the federal government to the municipality. The
CFDC, working with the local chambers of
commerce and tourism associations, is conducting the initial market research required to promote tourism in the Sunshine Coast region.

Community Futures Development
Corporation of Cowichan — This CFDC
hosted a creative planning forum for persons in
the Cowichan region and the south island area
this past November which generated 72 alternative business and employment ideas. A steering
group was formed which is examining the top
six ideas and will pair up fishermen with a consultant to do the feasibility studies around each
of these ideas.

Restructuring the Fishery

he need to restructure the fishery has been building for many years, and solutions will be needed long into the future. Coming to terms with the problems of a mixed stock fishery, and a resource under stress, does not have to mean a total shut-down. On the West Coast it is not too late for change.

Salmon Licence Retirement Program Now Underway -Vessel Tie-Up Complete

The size of the commercial salmon fleet was reduced during the 1998 fishing season through a one-time vessel tie-up program for 1998. Thirty-five per cent of vessel owners representing nearly 1,266 licences opted to tie-up their commercial salmon fishing vessels for the 1998 fishing season.

Vessel owners received payments which total \$9.5 million in federal funding. The payments are intended to offset costs that may have been incurred prior to the fishing season for those who then chose not to participate in the 1998 season. The tie-up payments were \$6,500 for gillnet and troll boat owners and \$10,500 for seine boat owners. Salmon licence fees were also suspended for those who chose not to fish in 1998.

The federal government has set aside more than \$200 million for restructuring the fishery through licence retirement, incentives for new selective fishing techniques and fisheries diversification.

The commercial salmon licence retirement

program is designed to meet conservation objectives through a substantial reduction in the number of licensed salmon vessels in the commercial fleet. The end result is to reduce the level of dependence on a fluctuating resource, and to create a more financially viable fleet. Over the longer term, it is also intended to address related allocation issues.

There are currently more than 3,300 commercial salmon licences on the West Coast. Many fishermen have indicated they wish to leave the salmon fishery. Licence retirement survey results show respondents are evenly divided on how quickly the licence retirement program should take place. As a result, two parallel processes have been put in place. Vessel owners who have already decided to leave the salmon fishery can submit bids through the early bidding rounds. Others, who need more information, are looking to the Department for a vision of the fishery of the future, especially with respect to allocation of the resource. These fishermen may decide to submit bids in later rounds.

To address that need, the Minister of Fisheries and Oceans Canada recently released a paper called A New Direction for Canada's Pacific Salmon Fisheries. That paper, along with a companion document on allocation principles released in December, will serve as a focus for a consultative process intended to address these issues and provide fishermen with more information to decide whether to retire their licences over the next few years.

A total of 99 commercial salmon licences have been accepted under the first round of voluntary commercial salmon licence retirement program, completed December 10, 1998. In the first round of the voluntary licence retirement program, 46 seine, 20 gillnet and 33 troll licences have been accepted for retirement. The average payment is \$420,152 to a seine licence holder, \$77,880 to a gillnet licence holder and \$77,532 to a troll licence

commercial salmon licences eligible for the licence retirement program on the West Coast. Of these licences, 442 are seine, 1,805 are gillnet, and 956 are troll.

The next round for the commercial salmon licence retirement program will begin immediately. The deadline for applications is February 15, 1999.

All bids will be evaluated by the independent advisory committee, which will make recommendations to the Regional Director General, Pacific Region. The committee will be made up of three individuals with expert knowledge of the industry, but with no stake in the outcome of the process, and three additional experts, one from each gear category. Some of the factors that may be considered by the committee to assess bids include vessel length, gear type, gear selectivity, licence catch history, age of licence holder, target reduction by gear and



holder. The estimated cost to retire these licences is \$23.4 million.

Fisheries and Oceans Canada received 1,124 bids, which were evaluated by an independent advisory committee chaired by Mr. Jim Matkin. The retirements represent 9.4 per cent of all eligible seine licences, 1.1 per cent of gillnet, and 3.3 per cent of troll. There are 3,205 remaining

area, and allocation by gear and area.

Information kits and application forms have been sent to all eligible, vessel-based salmon licence holders.

A toll-free line—1-877-666-0836—is also providing information on the voluntary licence retirement program.

Canada Experiments With Selective Fishing Practices

In traditional fishing practices salmon are harvested in mixed-stock fisheries where fish from different stocks and species intermingle.

Selective fishing limits the harvest of weaker species, such as coho, chinook, and steelhead, while allowing for the continued harvest of

Brailing on seine boats involves the use of a large dip net to scoop fish out of the seine net allowing fish to be sorted easily.

salmon from stronger stocks. Selective fishing methods mean conservation can be achieved while allowing the harvest of other species. As Don Lawseth, Selective Fishing Co-ordinator for Fisheries and Oceans Canada explains, "the more selective fishermen are, the more fishing opportunities there are likely to be."

Consultations with commercial, recreational and First Nations fishermen under the new plan began in May 1998 when Fisheries and Oceans Canada requested industry proposals for selective fishing projects. More than 90 proposals were submitted. Suggestions included

modifying existing gear such as altering net design, using different gear types such as weirs and seines, and adding revival tanks to all vessels. These industry proposals were incorporated into the 1998 fishing plan and experimental pilot projects were set up to test modifications to traditional gear and methods and alternate harvesting methods.

One of these projects occurred at Barkley Sound, Port Alberni in September 1998 where seine, gillnet and troll associations collaborated with Fisheries and Oceans Canada Science Branch in an experiment on post-release survival of coho and relative selectivity of fishing gear. Fisheries and Oceans Canada and Simon Fraser University scientists tested the stress of fish under various conditions by examining blood chemistry.

One alternate method adopted by seine vessels was the use of innovative brailer designs, such as using a "sock" to move the fish gently from the net in the water to the sorting deck for sorting. Brailing was also compared

to "ramping," a more common method of bringing fish in the net over the stern of the vessel. Early results indicate that seiners only caused about 0.14 percent mortality of coho, up to a time shortly after release. Selective fishing techniques used for gillnet fishing included shorter "soak" times and different mesh



Gillnetters are experimenting with various gear modifications to reduce bycatch.

designed to increase fish survival. While initial tests of this gear were successful, Fisheries and Oceans Canada and SFU scientists are studying the long-term impact on fish mortality through various tests. The survival rates of these fish will further be tracked through recovery of the tags applied at the time of capture and release to determine long term health and fertility as the fish return to the nearby hatchery. The results of these tests will be discussed in upcoming issues.

First Nations fishermen in British Columbia are also participating in selective fishing efforts. Along the Fraser River, many fishermen, including the Katzie and Kwantlen First Nations, are replacing gillnets with beach



Net fisheries experiment with various mesh designs.

seines to reduce bycatch. Others test fish traps and fish wheels.

"Outstandingly effective" is how Dr. Craig Orr, a consultant with the B.C. Aboriginal Fisheries Commission, who is conducting a selective fishery study funded by DIAND, gauges the success rate of the fish wheel being tested by the Yale First Nation. Orr describes the fish wheel as "something that looks like a Ferris wheel that is made for capturing and sorting salmon fishwheels have three or four baskets, pushed by the current, that scoop up fish and spill them into a live well." Once the fish collect in the well they are sorted, counted, and released.

Earlier this year six members of the Yale band travelled to the Nass Valley to learn how to handle fish using a fish wheel. With funding from Fisheries and Oceans Canada and the



Revival tanks are used to revive and hold fish for the duration of fishery.

assistance of Department of Indian and Northern Affairs, a fish wheel was built for the Yale First Nation. Fisheries and Oceans Canada scientists and First Nations fishermen tested the effectiveness of the wheel for catch rates and release survival. Catch rates were very successful, as of October 1,966 sockeye, 35 chi-



Beach seining by First Nations on the Fraser River.

nook, 149 steelhead, 103 chum, and 408 coho were caught, tagged and released using this technology. The tagged fish will be tracked to measure migration and mortality rates.

Recreational fisheries are also doing their part to achieve conservation goals and protect weaker fish stocks. Lawseth explains that there is a move to "specialized time and area fishing"

Fish wheel used by First Nations.

for recreational fisheries to maximize opportunities. Responsible fishing means sport fishermen are regulated by time and area closures, size restrictions, and the use of barbless hooks when fishing for salmon. Further, an ethic of catch and release is promoted.

As part of the ongoing consultation with fishermen regarding selective fishing, Fisheries and Oceans Canada, Fisheries Renewal and an Industry Technology Committee sponsored a two-day workshop in Richmond in early November. This workshop involved commercial and First Nations fishermen who reviewed the 1998 season and evaluated the selective fishing pilot projects. The success of conservation and continued economic harvesting is dependent on the input of fishermen from all sectors commercial, recreational, and First Nations and the Department of Fisheries and Oceans Canada is working to facilitate this process.



Recreational angler releasing a coho.

Diversification of B.C.'s Seafood Industry



Several initiatives are under way in British Columbia by Fisheries and Oceans Canada to foster diversification in the fisheries and the seafood industry. Diversification encompasses new and experimental fisheries, expansion of existing but underutilized fisheries, expansion of aquaculture to other species, and encouraging value-added in existing fisheries. These initiatives are intended to diversify the fishing industry.

The experimental fisheries are intended to promote sustainability of the resource while providing new economic opportunities for fishermen. This new funding will lead to diversification of B.C.'s seafood industry by exploring ways to expand new fisheries and improve value-added in existing fisheries.

Neon Flying Squid

The neon flying squid fishery has almost completed the third year of a three-year pilot. Although the fishery only experienced limited success in its first two years, greater success was

achieved during the last year. The performance of the fishery will have to be reviewed with industry at the end of the year, and its status, such as licensing conditions including the number to be issued, determined for next year.

Mackerel and Pilchards (sardines)

Experimental licences have been issued to fishermen for a pilot fishery on mackerel and pilchards. These species appear to move into B.C. coastal waters as the population in California expands and El Niño results in warmer water temperatures. In a joint program with the government of British Columbia and with the industry, Fisheries and Oceans has conducted stock assessment studies which have formed the basis for a management plan for this fishery. Seven licences have been issued for pilchards, each permitted to harvest 80 tonnes. Thirty-seven licence holders of various gear types have been identified this year to harvest approximately 100 tonnes of mackerel. The intent of this pilot is to develop food markets for the product and assess the effectiveness of different gear types and fishing techniques.

Tanner Crab

A three step development plan has been proposed for deepwater tanner crab, based on analysis of available information in B.C. and assessments of tanner crab fisheries elsewhere. The three steps are: a trap survey by a small number of fishermen to explore stock distribution, a trawl survey to estimate abundance, and, based on the information from the two surveys, an experimental, multi-year fishing plan. This proposal was discussed with interested fishermen at workshops in Port Alberni and Prince Rupert. The surveys are to be completed within

the next year and the experimental fishing plan developed, with fishing occurring next fall.

California Mussels

A pilot fishery for California mussels is under development for the north Vancouver Island area. The surveys required to develop an experimental fishing plan are being discussed with the proponents and First Nations in the area.

A Seafood Diversification Success Story

Omega Packing Ltd, of Masset, B.C., is responding to challenges presented by the downturns in the salmon industry by diversifying their seafood product lines. To help alleviate the shortfall of salmon over the last two years, the company has relied on specialized processing of Dungeness crabs. Now, with assistance from HRDC's Transitional Jobs Fund, support from the Province of B.C. and the 12 coastal Community Futures Development Corporations' Fisheries Legacy Trust, Omega has begun processing dogfish for world markets. By spring 1999, the project is expected to provide 35 much-needed long-term seasonal jobs to fishing industry workers in Masset.

The dogfish resource is currently underutilized on the B.C. coast and offers excellent valueadded economic opportunities as regional and global markets

exist for many parts of the fish. Uses include processed dogfish backs and fillets, used for fish and chips; belly flaps, processed as appetizers for the German market; fins, valued by Chinese consumers; cartilage, used by the pharmaceutical industry and dogfish livers and liver oil, used for cosmetics, pharmaceuticals and as fertilizer additives. The first shipment of 20,000 lbs of backs and belly flaps went to the European market in October and the plant has recently sent 2,000 lbs of dried fins and tails to the lucrative Hong Kong market.

Andy Erasmus, Omega Plant Manager, reports that 34 workers have been trained to process the dogfish and so far, the finished product has exceeded original quality expectations. "Our only setback to date has been the lack of landed dogfish to process," states Erasmus. "We've had

plenty of interest from local fishermen and expect to be in full operation by next spring when the small boats can go out again."

The dogfish are caught using trawl and longline techniques. Winter water conditions on the North Coast make it dangerous for small boats who normally use these techniques. Omega is currently securing the services of two larger vessels that can fish later in the year in order to supply dogfish until the small boats can supplement the landed catch.

HRDC is confident that the success of Omega Packing Ltd.'s dogfish processing pilot project will serve as an example to other organizations of how employers and communities can work with government in finding viable alternatives to the salmon fishing industry.

Stewardship is Key to New Approach to Habitat

British Columbians are more aware than ever that healthy habitat is crucial to the future of Pacific salmon, and Fisheries and Oceans Canada has heard widespread pub-

The Resource Rebuilding package will:

 Repair damaged habitat and rebuild weak salmon stocks by extending the Habitat Restoration and Salmon Enhancement



DFO works with many partners to restore habitat, such as estuary marshes.

lic support for stepped-up efforts to protect and restore habitat.

The Minister responded to that call by committing \$100 million to bolster DFO's action on salmon habitat and enhancement. In addition to restoring damaged fish habitat, this new initiative — called Resource Rebuilding — will focus on preventing further habitat damage or loss by encouraging community stewardship of our watersheds and waterways. This attention to protecting existing habitat is crucial in the face of B.C.'s spiraling population growth, which is leading to mounting pressures on aquatic habitat from urban and industrial development, agriculture, water withdrawals and resource development.

Program, which was due to end in 1999.

- Foster community-based watershed stewardship by establishing stewardship coordinators and habitat auxiliaries to assist community groups, industry and volunteers to effectively protect habitat.
- Expand the successful 20-year-old Salmonid Enhancement Program (SEP) with a stronger emphasis on strategic stock enhancement.

Restoring streams, rivers and lakes to increase the amount of habitat available to spawning and rearing salmon has long been a priority at Fisheries and Oceans. The Resource Rebuilding package will strengthen this by extending the Habitat Restoration and Salmon

Enhancement Program (HRSEP), through which Fisheries and Oceans works in partnership with community, fishing, Aboriginal and volunteer groups to repair damaged habitat, rebuild weak salmon stocks and improve watershed stewardship. The habitat restoration program has already provided \$15 million to community projects from 1996 to 1999.

The Resource Rebuilding package has so far injected an additional \$3 million into HRSEP for conservation projects this year. Many of the projects will benefit declining coho salmon stocks on Vancouver Island, Queen Charlotte Islands and in the Upper Bulkley and Skeena rivers. The following are examples:

- The Kwakiutl District Council received \$48,000 to increase coho stocks in the Tsulquate River. The council is working with partners to enhance fish at the Quatse Hatchery, assess stock abundance, restore habitat and complete a habitat inventory.
- The Alberni Valley Enhancement Association and Ducks Unlimited are using

- \$100,000 to restore part of the Somass River estuary as long-term habitat for fish and wildlife. The groups will build a dike to protect the area and replace several culverts to improve water flows for migrating salmon.
- Fisheries and Oceans is working with partners, such as the Baker Creek
 Enhancement Society and the cities of Quesnel and Williams Lake, to map urban streams in the Cariboo and Omineca-Peace regions. The initiative, which received \$100,000, is developing stream-protection regulations that can be incorporated into municipal bylaws.
- The Tlell Watershed Society received \$150,500 to build a counting fence in the lower Tlell River, a major coho producer in the Queen Charlotte Islands. The fence is collecting data on wild coho abundance and survival rates that will assist fisheries and habitat management.
- Fraser Valley municipalities, farmers and Fisheries and Oceans are using \$100,000 to



Effective planning is key to protecting habitat.

improve fish habitat in drainage ditches and streams flowing through farmlands. The project includes planting riparian vegetation along ditches that have the most significant coho salmon populations.

The possibility of establishing long-term funding for habitat restoration projects by community and stewardship groups is also being investigated.

To protect existing habitat, the Resource Rebuilding package will use new ways to promote watershed stewardship. A network of community positions, called habitat auxiliaries and stewardship coordinators, will be deployed around B.C. and the Yukon. They will support local community watershed stewardship groups and work closely with First Nations, developers, industry, farmers and other government agencies to prevent harmful impacts on fish habitat. They will build on the successful efforts of existing community and volunteer groups, and encourage the creation of watershed councils that can help balance local land and water uses with the interest of fish and fish habitat.

Stewardship coordinators will help communities develop and implement local watershed management plans and undertake more effective habitat protection and improvement projects. They will also coordinate public education and training on techniques for habitat restoration, assessment, mapping and data inventory.

Habitat auxiliaries will augment DFO's local habitat protection programs. They will work proactively with industry and developers, providing technical information and advice on fish and habitat needs, requirements for project approvals and assessments as well as legal obligations under the Fisheries Act. Auxiliaries will also monitor approved works in and around water to ensure projects comply with fish protection guidelines.

Another key element of Resource Rebuilding is strategic stock enhancement: using existing Fisheries and Oceans hatcheries to address serious conservation concerns for salmon stocks. For coho populations, this is a safeguard against continued declines, given that during the past decade, there has been a fivefold decrease in smolt-to-adult survival. If these declines continue, recent harvest restrictions may not be enough to rebuild coho stocks.

For 1998/99, the objective is to immediately enhance critically low Thompson and Upper Skeena coho stocks from extinction, while maintaining stock integrity and genetic diversity. Fisheries and Oceans, in consultation with local First Nations, has identified priority stocks. On the Upper Skeena watershed, coho stocks from the Upper Bulkley and Babine rivers and Toboggan Creek will continue to be enhanced. New production will begin on the Morice River (Owen Creek). New enhancement strategies, including fry releases, will be applied to the Upper Bulkley system.

On the Thompson River, existing enhancement will continue on coho stocks for the Salmon, Coldwater, Spius, Deadman, Louis, Lemieux and Dunn systems. New production will begin with coho stocks in the Eagle, Duteau, Bridge and Middle Shuswap systems. To allow for the additional production, hatcheries at Toboggan Creek, Spius Creek and Shuswap River are being modified and expanded.

Sperm from selected stocks is being frozen for future use if necessary. The operation of new counting fences on several river systems in the fall of 1998 will provide essential information on regional coho abundance to assist management decisions. Future years will see the development of area-based fish production plans for the long-term rebuilding of threatened stocks.

Local Contacts

South Coast

Nanaimo Area DFO - (250) 754-0230 WD - (250) 753-6414 HRDC - (250) 754-0222

North Coast

Prince Rupert DFO - (250) 627-3499 WD - (250) 624-6880 HRDC - (250) 624-9671

Vancouver Area:

Vancouver DFO - (604) 666-8266 WD - (604) 681-7130 HRDC - (604) 872-7431

Please visit the Pacific Region Fisheries and Oceans Canada website at http://www-comm.pac.dfo-mpo.gc.ca/default.htm

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